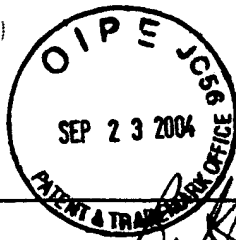




UNITED STATES  
PATENT AND  
TRADEMARK OFFICE



11042-005

MAY 31, 2002

PENNIE & EDMONDS LLP  
RORY J. RADDING  
1155 AVENUE OF AMERICAS  
NEW YORK, NY 10036-2711

RECEIVED TO  
REG'D  
JUN 07 2002  
Pennie & Edmonds  
O.K. for filing

Commissioner for Trademarks  
Arlington, VA 22202-3513  
www.uspto.gov



\*102046260A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/01/2002

REEL/FRAME: 012747/0872  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CHEN, WILLIAM T.

DOC DATE: 03/05/2002

ASSIGNOR:

MORAN, PETER M.

DOC DATE: 02/27/2002

ASSIGNEE:

INSTITUTE OF MATERIALS RESEARCH  
AND ENGINEERING  
3 RESEARCH LINK  
SINGAPORE 117602, SINGAPORE

SERIAL NUMBER: 10081768  
PATENT NUMBER:

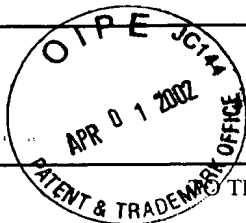
FILING DATE: 02/22/2002  
ISSUE DATE:

KIMBERLY WHITE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

04-02-02

\$ D

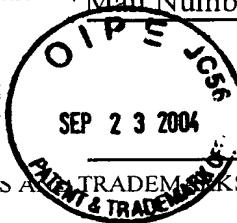
Mail Number: EL 501 742 970 US



04-08-2002



102046260



Attorney Docket Number  
11042-005

THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS  
Box Assignment  
Washington, DC 20231

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

4.1.02

William T. Chen and Peter M. Moran

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Dates: March 5, 2002 and February 27, 2002  
respectively

2. Name and address of receiving party(ies):

Name: Institute of Materials Research and Engineering

Address: 3 Research Link

Singapore 117602

Country (if other than USA): SINGAPORE

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 10/081,768

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

PENNIE & EDMONDS LLP  
1155 Avenue of Americas  
New York, N.Y. 10036-2711

6. Number of applications and patents involved: 1

7. Total fee (37 CFR 3.41):.....\$ 40  
Please charge to the deposit account listed in Section 8.

8. Deposit account number:  
16-1150

DO NOT USE THIS SPACE

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Rory J. Radding

28,749

Name of Person Signing

Reg. No.

Signature

*U.C. Reg. No. 36,196*  
*Rory J. Radding*

Date

April 1, 2002

Total number of pages including cover sheet:

3

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignment  
Washington, D.C. 20231

04/05/2002 AAHME1 00000145 161150 10081768

01 FC:581 40.00 CH

## ASSIGNMENT

WHEREAS, WE, William T. Chen and Peter M. Moran, ASSIGNORS, citizens of the United States and South Africa respectively, whose mailing addresses are 12 Oxford Drive, Endicott, New York 13760 and #04-08 Tower 3, West Cove Condos, 10 West Coast Crescent, Singapore 128041 respectively, are the inventors of the invention in **METHOD AND APPARATUS FOR FORMING A METALLIC FEATURE ON A SUBSTRATE** for which we have executed an application for a Patent of the United States which is identified by Pennie & Edmonds LLP docket no. 11042-005 and we hereby authorize Rory J. Radding, of Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, New York 10036-2711, to insert here in parentheses (application No. 10/081,768, filed 2/22/02), the filing date and application number of said application when known,

and WHEREAS, Institute of Materials Research and Engineering, ASSIGNEE, with principal offices at 3 Research Link, Singapore 117602, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

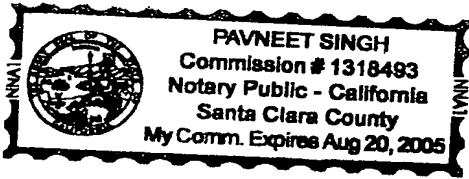
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date March 5, 2002 William T. Chen L.S.  
William T. Chen (Signature)

State of CA  
County of Santa Clara } SS.:

On 03/05/, 2002, before me PAVNEET SINGH  
Notary Public, personally appeared William T. Chen, personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal  
Pavneet Singh



Date 27/2/02 Peter M. Moran L.S.  
Peter M. Moran (Signature)

Before me, a witness, personally appeared Peter M. Moran, to me known and known to me to be the person of that name, who signed the foregoing instrument, and he acknowledged the same to be his free act and deed.

Date 27/2/02 [Signature] Signature of Witness  
Anna Sze Sze Name of Witness

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): William T. Chen and Peter M. Moran

Docket No.

16172.1

Application No.

10/081,768

Filing Date

February 22, 2002

Examiner

Michael Barr

Customer No.

022913

Group Art Unit

1762

Invention:

METHOD AND APPARATUS FOR FORMING A METALLIC FEATURE ON A SUBSTRATE

I hereby certify that the following correspondence:

Transmittal of Information Disclosure Statement (1 pg); Supplemental IDS (2 pgs); PTO Form 1449 listing all cited references (2 pgs); Copies of 3 Cited References (39 pgs); Transmittal for Revocation & Substitute Power of Attorney (1 pg); Revocation & Substitute Power of Attorney (2 pgs); Change of Attorney Docket Number (2 pgs); Request for Continued Examination Transmittal (1 pg); PTO 2038 Credit Card Form (1 pg); and Postcard

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

September 23, 2004*(Date)*Kysa J. Nord*(Typed or Printed Name of Person Mailing Correspondence)*  
*(Signature of Person Mailing Correspondence)*EV 367 550 630 US*("Express Mail" Mailing Label Number)***Note: Each paper must have its own certificate of mailing.**